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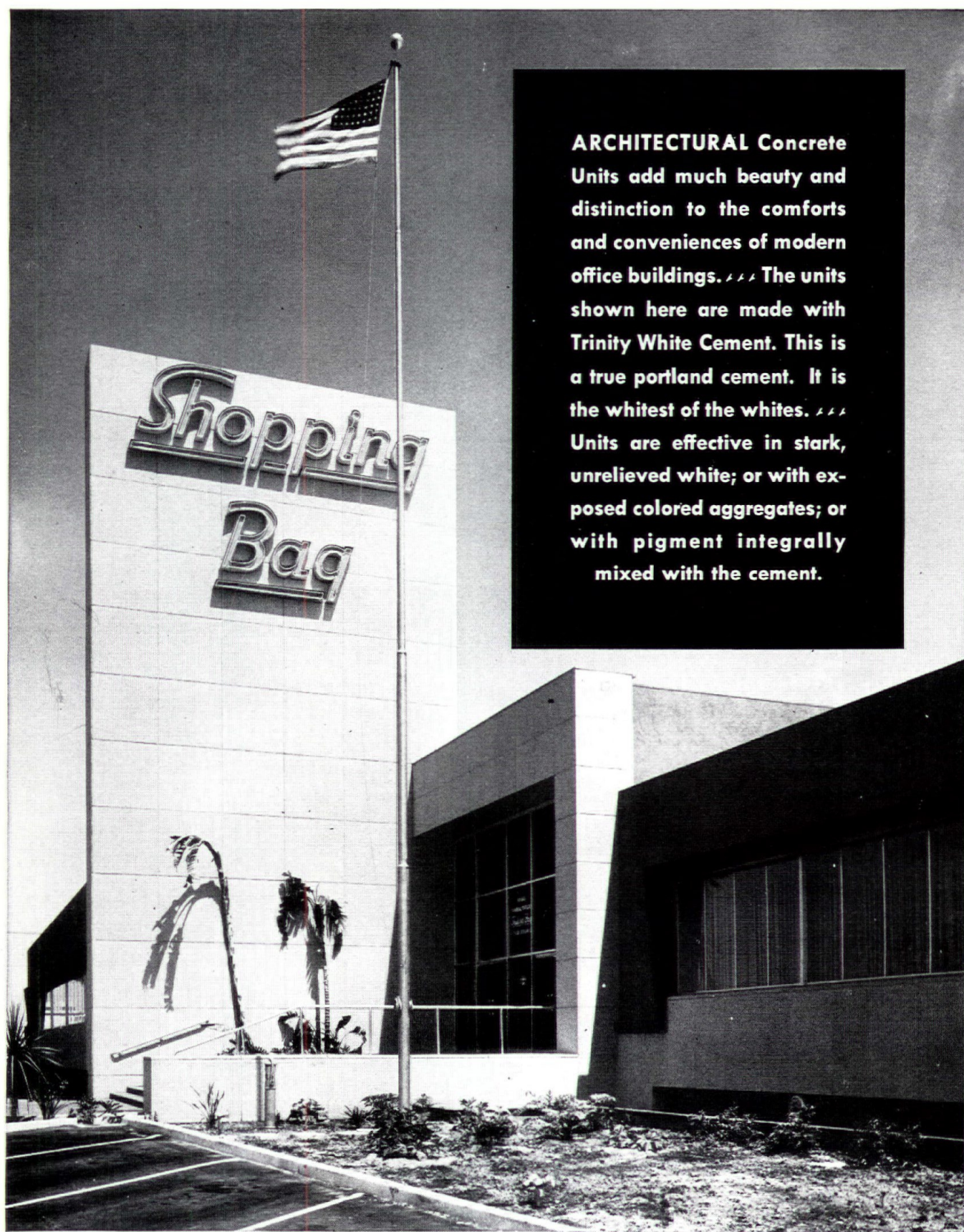
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## OUR COVER

*The interesting sketches gracing the cover of this issue are from Bartlett Cocke and were done on his recent trip through various countries of South America. We are indeed grateful to Mr. Cocke for his efforts and to Mr. Reginald Roberts for sending them along to the TSA office with the suggestion they might be used. It is this type of cooperation which will make for better issues in the future.*

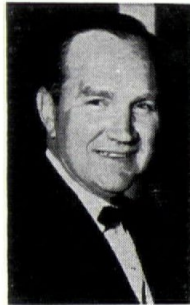
## The President's Letter

By

JACK CORGAN

President

Texas Society of Architects



It has been said that "A prophet is without honor in his own country." To the architects of Texas this has become increasingly apparent the past several years.

There has been a trend in recent years for architectural commissions on many of the larger and very desirable projects to be awarded to out of state architectural firms. The glamour of the out of state architectural firm is further enhanced by highly paid public relations firms. These public relations firms see to it that every bit of favorable publicity that can be obtained for the firm is properly disseminated where it will do the most good.

These larger firms, complete with traveling salesmen, economists, market research men, real estate analysts, lawyers — and architects, have made great inroads into the architectural potential of Texas, and have positively emphasized that we are truly in an era of 'big business.'

Granted, that much of the work done by these large firms is good. There is no assurance, however, that mere bigness will produce good architecture. To the contrary, there is more of a possibility that it will not. The owner rarely comes in contact with the principal after the original architectural contract is negotiated, and the work is progressed through its various stages much in a similar manner that a product is manufactured.

Texas has some of the finest architectural firms in the country and is capable of producing some of the finest architecture. There is no dearth of talent nor manpower to produce these larger projects that look to greener fields far away for their architectural talent.

It is our belief that Texas industry, Texas economy — and Texas architecture will be better served if business will take a good look at the talent available in its own backyard, before seeking its architectural services from afar.

Let us hope that these major, well budgeted, well-financed projects that are being produced by out of state architects will, in the future bear the label "Produced in Texas by Texas Architects."



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# METHODS OF MAKING HEAT BEHAVE

....range ingeniously from the old log  
fireplace to the capture of sun's rays

BY EUGENE GEORGE, JR., A.I.A.

IT was a cold, drizzly January evening when I turned into Atwell Lagow's driveway. The week had been one of those now hot, now cold types of phenomenon described by Texans as "Texas Weather." By the time one is adjusted to the freakish winter warm cycle, it's suddenly cold. Then new adjustments must be made and so on, *ad infinitum*. At the Lagow house, there are compensating mechanisms for such things which occur almost magically. A steaming cup of coffee appears by one's elbow to warm the inner man, then further soul warming takes place in the form of good conversation. There is, in addition, a further device which makes one completely unaware of the physical gloominess of the evening. The Lagows have radiant heating.

The door opened with my knock. I entered, and waited for the magic to begin. The steaming cup of coffee soon arrived, and random thoughts began to organize themselves for the evening's conversation. The night being quite cold outside, we talked of heating. Since I was sitting in the living room of a mechanical engineer who specialized in the subject, he could speak on same with authority.

We discussed problems of other times. There was a pioneer family named Kerbey who moved into the immediate protection of Fort Gates. Located near present Gatesville, the fort was placed at the edge of a post oak grove which extended to the north bank of the Leon River. Assistant Surgeon Johns complained of the location from the beginning. He stated that the post oak woods would fail to check the wind from the north in the winter, yet would

perform the undesirable function of serving as a block to the prevailing summer breeze. As was predicted, the location was hot in the summer and cold in the winter.

The Kerbey family set up house-keeping on this site during the month of June, 1854. Logs were notched and placed for the walls, cedar poles were dressed for the rafters, and oak boards were riven for the roof. A stone fireplace was built to provide the necessary, but inadequate heat; and on this fireplace most of the cooking was done.

The winter of 1854 was a bad one for the Kerbeys. It was a severe winter, punctuated with a running battle of chills and fever. One day, Kerbey went north over the mountain on a private foraging expedition. The accounts do not state whether or not he bagged any game, but he did locate a good building site. The nature of the site was such that it could take every cooling advantage of the prevailing summer winds. Further, there were natural devices which permitted it to enjoy the greatest warmth possible during the most severe of 'northers.' In addition, an excellent spring supplied copious amounts of water. In fact, the only thing against the site was that hostile Comanches sometimes ventured into the neighborhood.

On his return, Kerbey put this question to his wife: "Would you rather stay at the fort and fight chills and fever, or would you prefer moving to the spring and taking chances with the Indians?" His wife, without hesitation, stated that she would chance the Comanches. They moved to this spring (Cougar Spring) and built a dwelling there. Fortunately, they were never visited

in a hostile manner by Comanches. Fortunately, too, we do not have to expose our families similarly in order to enjoy good heating.

Today's heating, however, involves more than just throwing another log on the fire.

We talked of the criteria by which heating systems are designed. Though there is another way by which the problem can be approached, the most reasonable way seems to consider the regulation of the rate of heat lost from the human body itself. If we can consider the body as a heating system, and if we can establish ways by which this human heating system can be made to function efficiently; then we will have gone well into the study of human comfort.

Consider the nature of how heat behaves. It *always* travels from a warm object to an object less warm, or from hot to cold. If we sit with our bare feet on a block of ice, we serve as the heating mechanism which warms the ice. Heat is thus *conducted* from us by contact with the ice, and we become cold. Probably, with the block of ice, our bodies would send out distress signals in the form of chills; or even body heat would begin to be generated by muscular 'shivering'—the body's way of making us 'work' to keep warm.

Another way that heat moves is by *convection*. This type of heat transfer is concerned with the heat moved from a warm object into a cooler airstream; or, conversely, heat is passed from a warmer airstream to a cooler object. In this case, the stream of air is the

(Continued on Next Page)



mechanism by which heat is transferred.

The most comfortable type of heat transfer by far is by *radiation*. Radiated heat is that type of heat which is transferred directly between objects in space. Transmitted similarly to light, radiant heat is diffused in straight lines and has almost no effect on the atmospheric medium through which it passes.

The heat from the sun is an excellent source of radiant heat, and accounts for the fact why we may feel comfortably warm in light clothing during a clear, calm, but wintry day. Human skin, being 99 per cent emissive, as well as absorptive, of the infra-red rays which make up the radiant band is an ideal mechanism for receiving radiant heat.

There is one other method of heat transmission which might be mentioned. This is heat transfer by *evaporation*. So far as the human body is concerned, the evaporative process has a specialized function operating under high temperature conditions. Heat is transferred quickly from the body in the form of perspiration which evaporates on contact with the air. Hence, whatever method is employed, a good heating system's main function is to maintain evenly distributed body temperatures. Let us examine some of the mechanisms which produce good heating conditions.

*Conduction:* Though much heat is passed from the body by conductive methods, few heating systems which supply heat to the body are based on this principle. For one thing, it would require a person to sit still in contact with the heat source. Other than the electric blanket and electrically heated flying suits, this type of heating is rather remote. Our grandfathers might have sat in the general store with their wet boots propped against the foot railing of the ever present potbellied stove. Though the cast iron stove presumably would be radiating heat from its iron surfaces, the wet feet would be comforted by conduction.

*Convection:* Convection is another matter. Most of our up-to-date heating systems in Texas are of the convective type. That is, a stream of air is heated in a chamber, pushed by a blower through a system of ducts, then returned again through another system of ducts to be rewarmed and redistributed. Outside air is periodically mixed into the system to refresh the recirculated air. The reason why most of our warm air systems are of this type is due to the fact that these same ducts, slightly enlarged, can pass chilled air as well as warmed air. Due to this cooling advantage, the warm air convection system is probably the most flexible for our varying Texas weather. A good warm air system using natural gas for a fuel, supplemented with an electrical refrigeration system, can hardly be bettered under normal city residential use.

For rural use, or in smaller towns where natural gas may not be available (if such exist in Texas), there is another answer. This answer is very undramatically labeled the *heat pump*. The principle of the heat pump is easy to understand. Place yourself out-of-doors near a refrigeration type of window cooling unit. If you move over into the stream of discharge air, you will find that it's very warm. Great quantities of heat are being transferred into the atmosphere. Imagine that same window unit turned around in the window during the winter period. That same heat discharge which was so unpleasant outside during the summer now serves a useful warming function. By refrigerative methods, heat is being transferred from the *cold outside air* to be discharged into indoor living spaces.

Imagine a more sophisticated system than the window unit described, with its blower and ducts, a reversing mechanism that will switch the refrigeration circuits; and you have the basic idea of the heat pump.

Due to the fact that the heating load in the winter is greater than the cooling loss in summer for the equipment, a small auxiliary heater will be necessary to boost a bit more heat into the duct system. But remember,

too, that a saving is made in that no cooling tower with its adjunct circulatory equipment is required. Is the heat pump a new idea? It is believed that the first heat pump was installed in Scotland in 1927, though the idea of the heat pump was announced by Professor William Thompson (Lord Kelvin) over 100 years ago.

Another convection type of heater is the floor furnace. If a thermostatically controlled floor furnace were placed in every room; adequate, well balanced, draft free heating could be the result. However, to provide the number of floor furnaces required to do the job properly would involve costs on the scale of the duct system. Since the duct system has cooling possibilities, it hardly seems reasonable to consider a complete floor furnace system. In addition, there is a hot grille occupying several square feet of valuable floor space.

Though a convection, or forced warm air system, has advantages in that a cooling system may be economically introduced; it is not nearly so comfortably as a radiant system. With the convection system, the objects within the room are always colder than the air temperature. Hence, everything we touch seems slightly 'chilly.'

*Radiation:* The most comfortable heating system by far is that of radiant panel heating. When our troops were in Korea, they often found the Koreans building fires on the windward sides of their small houses. Ingeniously, the warm air, gasses, and smoke circulated through a rough duct system imbedded in the earthen floors. By this simple technique, the Koreans enjoyed radiant heating. The floor was heated by subterranean passages, the smoke eventually finding its way out through a vertical flue. Had these same troops been stationed in Rome 1,800 years ago, they would have found similar heating techniques employed on a far greater scale than the Koreans had even known.

Though similar types of warm air systems are utilized in this country  
(Continued on Page 13)





Many architectural firms and artists in Austin exhibited their works at the grand opening of the Rio House, 46-unit luxury apartment house, which was converted from the old St. David's Hospital building. The unique showing drew several thousand of people who were provided an eye-opening demonstration of what art and architecture afford in modern living.

## RIO HOUSE CONVERSION

*... provides graphic demonstration  
of art and architecture in rhythm*

ART and architecture joined hands to present a graphic demonstration of their importance in modern living recently in Austin.

Several thousand people took advantage of the opportunity to inspect some unique examples from both fields while touring the Rio House, which offers eye-opening proof of what skilled architects can do with old buildings — and imagination.

Twenty-eight of the Rio House's 46 luxury-type apartments are located in the old St. David's Hospital Building, which was constructed in 1928. The Austin architectural firm of Page, Southerland and Page used a clever blend of artistic tools in converting the building into modern apartments, adding a new wing to it and installing a swimming pool in the colorful, spacious patio.

One of the most unique features of Rio House is the fact that the architectural firm decided to buy the old hospital building, rebuild it — and then operate the apartment house itself. By the time it opened,

Rio House had been booked up by eager tenants and already had a waiting list.

"A number of people had looked at the old building and considered buying it, most of them thinking of converting it into office space," said Louis F. Southerland. "After nearly everyone had a try at it, we took a look at it and decided we could do something with it.

"We made a careful survey and decided there was no immediate demand for additional office space in Austin, particularly since several new state office buildings were under construction," Southerland said. "There seemed to be a shortage of high-class apartments, although we found lots of middle-class apartments in town.

"We spent about six months planning the project and working out a practical scheme for conversion," he said. "The actual construction work took about another six months."

Southerland admits that it "hurt a little" to have to tear down an old

Victorian Mansion on the site, adjacent to the Hospital Building.

"It was four stories, had about 20 rooms and was beautifully constructed," he recalled. "It was built originally — I guess about 75 years ago — as a private home. Then it became a private school for girls, and then it was used as the original St. David's Hospital before the other building was constructed in 1928.

"I hated to see it come down but there just wasn't any use for it, particularly in view of the air conditioning and heating necessary these days."

Southerland's firm invited all of the architectural firms and artists in Austin to establish exhibits at Rio House for its grand opening. Most of them took advantage of the opportunity to show the use of artwork in modern architecture.

Two of the most outstanding examples of sculpture were retained permanently as an important part of the Rio House decor. Gracing the patio are two large, colorful shorebirds in flight, produced of metal and ceramics by Paul Hatgill, an art instructor at the University of Texas.

Permanent though they may be, it seems likely that their effect will be no more lasting than the good will radiated by the unique opening and its "non-partisan" exhibits.



## Architectural Treasures Abound in Picturesque Hill Country

By MARVIN EICKENROHT  
A.I.A.

**F**REDERICKSBURG, the least spoiled of all our major German settlements, has survived the inevitable ravages of destruction and decay with many unspoiled architectural remnants of the pioneer days, along with a number of restorations, still standing.

This picturesque city, located in the plateau part of Texas' beautiful Hill Country, was founded in 1846 by colonists under the leadership of Otto Hans von Meusebach. Now, more than a century later, it is a delightful place to visit — and one that yields particularly lush dividends to anyone interested in architecture.

Nearly all of the architectural remnants of the pioneer era were built some years after the arrival of the settlers, who, in typical frontier fashion, had to first provide themselves with crude shelters of a recognized temporary nature. Much of this original construction was log work, adapted from contemporary Anglo-American examples and generally differing from them only in the notching, or other treatment, at the corners. Cypress for this early construction was available in abundance.

Buildings constructed later were much more elaborate and, in many cases, quite ingenious.

Generally, Fredericksburg houses were one-story, with two rooms of unequal size under the main roof and a narrow lean-to kitchen in back, often balanced by a porch

lean-to facing the street. There were no halls; one of the front rooms was always larger so that it could serve as a living room in addition to fulfilling its primary function as a bedroom. When the steep stair to the loft or attic was inside the house, it was located in a corner of the larger main room. Two-story houses were the exception, although the attic of one-story houses was always used for sleeping quarters; outside approach to these attic quarters was by ladders and, later, by interesting stairways. Irregularities in this basic concept for a one-story dwelling were generally due to later additions, which sometimes created amazingly picturesque effects.

The earlier permanent construction was half-timber (*fachwerk* in German) but later much solid stone construction was used. Generally, this stone work was "solid" rather than a facing over a cemented wall of chips, rubble, or other grouted filler as is so often found in early Spanish work. However, in time these walls would leak, and many were stuccoed or covered with wood clapboard siding to render them waterproof. Roofs were pitched at a little less than 45 degrees, and were covered with handmade cypress shingles.

**O**FTEN these houses were embellished by exquisitely conceived and executed millwork in doors, door and window casings, stair rails and newels, and transoms. Many transoms, similar to the "bow-and-arrow" transom in the Keidel residence, and just as pretty, are still in existence. Evidences of "jig-saw"

ornament, as in the Staudt Sunday House, were all due to later additions.

Churches and community buildings sprung up as the settlers became more prosperous and more firmly rooted into their surroundings. The Old St. Mary's Catholic Church, so carefully measured and drawn by Emil Niggli, Louis Page, and others still remains an outstanding landmark, although apparently it is not appreciated as such by its owners, who first converted it into a religious education building and later, I believe, to storage facilities.

The octagonal Verein-Kirche, "Coffee-Church" or community building, destroyed in 1896, was reconstructed in a quite creditable manner in 1934-36 under the direction of Lee Kiehne, talented young architect and a descendant of Fredericksburg pioneers, who died in his youth. The building is now used as a library, contains many interesting treasures, and is conducted at present by the gracious Ada Peden.

The old two-story porticoed post-office building, fortunately, was completely measured before being torn down by a thoughtful Uncle Sam, who couldn't find another site for the stereotyped horror he saw fit to erect. The old Nimitz Hotel, however, was wrecked before such a thing as measured drawings had been given much thought, and only photographs of this picturesque wooden structure remain. The house in which Admiral Chester Nimitz was born may still be seen on Fredericksburg's wide Main Street.

The entire county of Gillespie and much of the country beyond is, of course, a treasure house of fascinating rural dwellings, some very tiny and now being used for smoke houses and livestock feed storage, others quite pretentious and still in use as residences, such as the "raised cottage" story-and-a-half Kneese House. At Cherry Springs, one will still find the Rode House, now on the property of the Kothe family; the late Samuel Gideon considered the stone barn of this building group



one of the finest examples of Hill Country architecture.

Fredericksburg has abundant examples of sympathetic restoration and preservation.

Several years ago, St. Barnabas Episcopal Church acquired a charming little half-timber structure, and converted it into a House of Worship. My recollection is that Vernon Helmke of San Antonio and R. M. Krause of Fredericksburg collaborated on this work in the architectural capacity.

Albert Keidel, descendant of a pioneer family, and a talented but inactive Fredericksburg architect who now engages principally in ranching, has been responsible for some fine restoration work. Albert is always ready and willing to show appreciative visitors to Fredericksburg all there is to see, in a manner reminiscent of the courtesy habitually extended to architect visitors in New Orleans by Richard Koch and Sam Wilson. Albert was the architect for the Keidel Memorial Hospital, in which the new two-story structure was nicely integrated with the fine old Keidel Residence next door.

The John Peter Tatsch House, with its magnificent "milk-bottle" chimney, has been preserved virtually intact by a San Antonio resident, Walter Tatsch, grandson of the builder, much to his credit.

WITH so many city people these days seeking weekend cabins in the country, Fredericksburg's "Sunday Houses" are among its most fascinating structures. They resulted from a Fredericksburg custom finding its counterpart in Dutch Pennsylvania but nowhere else in Texas. Sunday Houses were the outgrowth of the farmer's desire to share in the superior social, educational, and religious advantages to be enjoyed in town. The farmer, finding that he could not impose himself and his family on his town relatives weekend after weekend, decided that a town house of his own was the answer. The result was the erection of a number of these charming dwellings.

Fredericksburg comes quickly to

mind in recalling the highlights of an address by Paul Thiry at the New Orleans Convention anent our architectural heritage. From his remarks, I quote the following excerpts:

*"Continuity requires knowledge of the past and the present. Continuity imposes an obligation to retain the useful. Although the past cannot be revived in its own contemporary spirit, neither can it be ignored because of its impact on the present."*

*"I question if we architects have ever excelled the great cathedrals of Europe or the temples of the East. Every community has its potential Piazza San Marco. In most early American villages, towns, and cities there are plazas, squares, town halls, and churches, that not only manifest the historic past, which we should know and cherish, but manifest scale and beauty as well."*

*"Let us not be prone to ignore the value of the treasures we are destroying. Too often we allow them (historic buildings) to disinte-*

*grate before us. Structures which have withstood generations of use and, potentially, could continue to do so, are left to neglect and ultimate demolition, too often to make way for nothing better than a storage yard or parking lot."*

*"If we disrespect the past, and are careless with the present, the future does not bode well for us."*

A week-end drive to Fredericksburg is always a restful and refreshing experience. I shall never forget my first trip, made in a Model-T Ford, on a misty Sunday in 1926; it turned out to be one of those perfect days, making one feel that "all's right with the world."

Getting there these days is, of course, much easier than it was then. No matter how many times I return to this delightful city, I still get a thrill, a fresh viewpoint and a tremendous feeling of satisfaction from visiting it. I strongly suspect that you would, too, particularly if you recognize the importance of our architectural heritage.

Why not try it sometime?



A classic example of a number of restorations still standing in picturesque Fredericksburg is the octagonal Verein-Kirche, "Coffee-Church" or community building pictured above. The building, destroyed in 1896, was reconstructed in 1934-36 and is now used as a library.



# REVIEWERS LAUD BOOK BY STAUTZ

By **HUGH L. McMATH, A.I.A.**  
Professor of Architecture,  
The University of Texas

*PLANNING YOUR SCHOOL  
BUILDING DOLLAR, by Carl H.  
Stautz, A.I.A., T.S.A., Austin, Texas.  
March, 1960, Chilton Company, Book  
Division, Philadelphia.*

In reviewing the manuscript of *PLANNING YOUR SCHOOL BUILDING DOLLAR*, by Carl Stautz, I find it to be a well documented presentation of information that should be helpful to all who are concerned with the use of public funds in the building of our schools — school boards, administrators, citizens, and architects. The book is unique in that it is the first time such material has been published. This reviewer could not help but be conscious of the value of this publication to our profession of Architecture. At a time when the profession is seeking improvement and public recognition, author

Stautz has made a significant contribution to both efforts. Certainly the building of well planned schools within the budget — in other words, the sound expenditure of public money, is the responsibility of the Architect.

However, rather than pursue my own review further here, I have chosen to provide you with the following excerpts from reviews written by well-known public school administrators and educators, including our own highly esteemed Professor Goldwin Goldsmith.

"I have read with interest Mr. Stautz' manuscript *PLANNING YOUR SCHOOL BUILDING DOLLAR*, and feel he has alerted the reader to most of the important pitfalls that dog the steps of the school planner. . . . I liked Chapter 5 on interviewing and selecting the architect; in fact, most of the advice throughout the manuscript is very good.

—E. R. C. Billerbeck, Director  
Architecture and Construction  
Branch, Los Angeles City  
Board of Education, Los  
Angeles, California

"The high cost of construction coupled with the inexperience of school board members and school administrators creates a troublesome situation for the building funds of any school district. It is gratifying to see a publication designed to give guidance at this time in this vital area. . . . A careful reading of *PLANNING YOUR SCHOOL BUILDING DOLLAR* will be of tremendous value to anyone associated with school construction."

—M. H. Specht, Superintendent  
of Schools, Comal County,  
Texas

"Mr. Stautz has handled his subject from a very practical point of view and has illustrated it with case histories which are familiar to me from my experience in my own practice of many years ago. . . . Mr. Stautz' book should help School Boards and citizens committees with their problems and to see and appreciate the problems of their architects. It should certainly teach them to investigate the completed projects of school architects, not only as to successful planning and design, but also the success of the architects in keeping the

cost within the prescribed limits set by the Boards."

—Goldwin Goldsmith, F.A.I.A.  
Professor Emeritus, School of  
Architecture, The University  
of Texas

"I have just finished reading Mr. Stautz' manuscript, *PLANNING YOUR SCHOOL BUILDING DOLLAR*, and feel that he has brought into focus a pressing need for the Schoolman and the Taxpayer to take a look at the mounting cost of providing schools for our growing population. . . . I was impressed by Chapter 6, "The Architect's Responsibility." There are too many communities suffering today from the lack of proper study and guidance on the part of the architect."

—Marley Giddens,  
Superintendent of Schools,  
Columbus, Texas

Every member of the Texas Society of Architects will find *PLANNING YOUR SCHOOL BUILDING DOLLAR* a real contribution to the Society's efforts to make Architecture a profession of service by dedicated and responsible practitioners, who are respected for these qualities by the citizens of our State. Through conscientious effort to this end, we will automatically achieve good public relations!

## New Magazine Names Caudill

**WILLIAM W. CAUDILL** of Caudill, Rowlett, Scott and Associates, Houston, is one of 18 elected to the Editorial Advisory Board of *OVERVIEW*, the new magazine for all educational administrators.

Mr. Caudill, whose firm specializes in the planning and designing of educational facilities, will help shape the monthly magazine's editorial policy and direction in an advisory capacity.

The Houston architect first drew praise in educational circles for designing the development plan for Texas A&M in 1940. A graduate of Oklahoma A&M, with a Master of Architecture degree from the Massachusetts Institute of Technology, Mr. Caudill was later chief engineer for a \$15 million war construction project during World War II.


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FIVE distinguished U. S. and Canadian architects have been named to select the foremost contemporary structure in the world whose creative use of aluminum could significantly influence the architecture of our times.

The designer of that building will be given the \$25,000 R. S. Reynolds Memorial Award for the outstanding use of aluminum in architecture.

The American Institute of Architects named as members of the 1960 Reynolds Award Jury:

*Dr. Walter Gropius* of Cambridge, Massachusetts

*Philip Will, Jr.* of Chicago, Illinois

*James M. Hunter* of Boulder, Colorado

*Arthur Fehr* of Austin, Texas, and

*C. E. Pratt* of Vancouver, British Columbia, Canada.

Dr. Gropius, as one of the fathers of contemporary architecture, is famed for his leadership of the Bauhaus school of design. Later as

# AIA Selects Five For Reynolds Jury

Chairman of Harvard University's Department of Architecture, Dr. Gropius revolutionized architecture in America. He is a Fellow of the American Institute of Architects as are Will, Hunter and Fehr. Pratt is a Fellow in the Royal Architectural Institute of Canada.

This Jury will meet in Washington, March 14-15 to consider nominations for the 1960 Reynolds Award. The chairman, elected by the Jury, will announce the recipient of the Reynolds Award after judging is completed.

The winning architect will receive the \$25,000 Award in April 1960 at the annual convention of the American Institute of Architects at San Francisco, California.

The R. S. Reynolds Memorial Award is conferred annually on the architect who has designed a significant work of architecture in the creation of which aluminum has played an important contributing role.

Prime consideration is given to the creative value of the architect's contribution to the use of aluminum, and its potential influence on the architecture of our times.

Buildings completed during the last three years are granted preference although older structures are eligible.

The American Institute of Architects administers the nominations, jury selections and all other aspects of the Reynolds Award.

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## Schools and Churches Feature March Conferences

CONFERENCES, under the co-sponsorship of TSA, to bring together all who are concerned with church and school building needs are scheduled within the state during March.

"Schoolhouse," a study of school building in a non-commercial program, will be held in Austin, March 4-5. Jonathan King, secretary, Educational Facilities Laboratories, Inc., New York City; James F. Redmond, superintendent, Orleans Parish Schools, New Orleans, La.; and Henry Wright, partner, Kistner, Wright and Wright, Architects, Los Angeles, Calif., are scheduled as principal speakers. Four different clinics, staffed with expert authorities, architects, engineers, contractors or other specialists, will be conducted during the two-day session. A registration fee of \$5.00, payable either in advance or on arrival, should be made to Schoolhouse Con-

ference Secretary, Room 203, 1512 Guadalupe, Austin 1, Texas.

The "Texas Conference on Church Building and Architecture" will be held March 24-25 at the First Methodist Church, 800 West Fifth Street, Fort Worth. The Dallas and Fort Worth Chapters, AIA, and Dallas and Fort Worth Council of Churches are co-hosts. Principal speakers will include:

The Reverend Scott Turner Rite-nour, executive director of the Department of Church Building and Architecture of the Division of Home Missions, National Council of the Churches of Christ.

Mr. Robert L. Durham, F.A.I.A., partner, Durham, Anderson and Freed, Seattle, Washington. He will give an illustrated presentation on "Using Creative Design In Churches For Today."

The Reverend Edward S. Frey,

executive director, Department of Church Architecture, United Lutheran Church in America, New York City.

Registration for the conference is \$6.00 per individual on pre-registration and \$7.50 otherwise. Request for reservations should be addressed to The Hotel Texas, 815 Main, Fort Worth.

In addition to the two state conferences, The Church Architecture Department of the Southern Baptist Convention will conduct a meeting of architects in Nashville, Tenn., March 15-16. Instructions for architects who wish to present some of their ecclesiastical work are available upon request to:

Mr. W. A. Harrell, secretary, Church Architecture Department, The Southern Baptist Convention, 127 Ninth Avenue, North, Nashville 3, Tennessee.



# Impressions

## ON SCANDINAVIAN TOUR

By GRAYSON GILL  
A.I.A.

THE Building Research Institute assigned four of its members, including the writer, to report on the meeting of the CIB International Building Congress in Rotterdam, September 21-25, 1959. The Congress brought together some four hundred persons to hear forty-four papers presented by authors from nineteen countries in English, French, or Russian, the three official languages for the sessions. Attendance at these sessions and participation in the inspection trips during the four days of the week following the Congress were rewarding experiences. However, ten days spent in Scandinavia prior to the Congress brought some impressions of equal significance.

We in America accept the high standards of design and quality of Scandinavian textiles, silver, jewelry, and furniture as a matter of course. My brief observation indicates two reasons for their excellence in these fields.

First, they have the tradition of creating beautiful things. In their museums are preserved ordinary household utensils a thousand years old, highly ornamented in excellent taste with a fine sense of design, patiently done by the light of candles during the long winter nights. These skills have been handed down from generation to generation, refined over the centuries as tools and materials were developed to meet the demand for beautiful things which their growing wealth made it possible for them to enjoy.

Second, the talented craftsmen, artists, and designers who create these things which add so much to their joy of living are recognized and honored to a degree unknown to us here in the United States, with few exceptions. The designer who

made the most utilitarian item a thing of beauty was identified as its creator in the market place.

The City Hall in Oslo, Norway,

is one of the beautiful and impressive contemporary buildings in Europe. It was the crowning achievement of two Oslo architects. Flanking the center arch of the main entry hall are two pedestals on which are the busts of — the King and Queen? — a couple of legendary Viking heroes? — no, the two architects who designed the building, one still living.

## PENDLEY AND DAY DESIGN HONOREES

THE design for an apartment building for RHR Corporation of Austin by Pendley and Day, Architects, and Paul E. Harrill, associate, was awarded a residential citation in the seventh annual design awards program sponsored by "Progressive Architecture," a national architectural magazine.

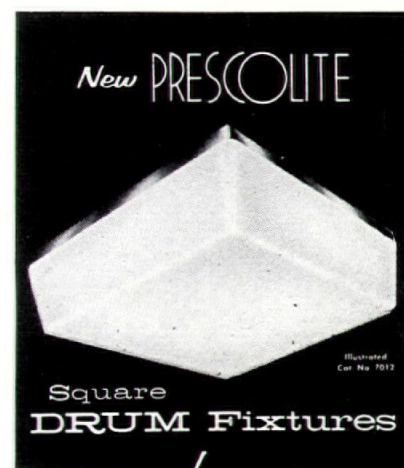
In addition to the Austin award, presented at an awards banquet at the Park Lane Hotel, New York City, twenty-one separate projects were honored from six hundred entries in ten building categories.

The "Progressive Architecture" program is based on commissioned projects in the design stage rather than on completed buildings or theoretical proposals. In designing the 12-unit, semi-luxury apartment house the Austin architects sought to "avoid the in-line, L or U solution and to create a small house environment with a 'patch of green' for each unit." To preserve privacy for all on the small site, windows were placed to face garden walls or solid walls of neighboring units. The entire complex is linked, according to local ordinance, by one continuous roof.

The panel of jurors for the program was composed of Ralph Rapson, Head, Department of Architecture, University of Minnesota; Louis I. Kahn, noted Philadelphia architect; Jose Luis Sert, Dean, Harvard

Graduate School of Design; William W. Caudill, of Caudill, Rowlett, Scott and Associates, Houston; and Lyndon Welch, of Detroit.

Sketches and plans of the award winning buildings are featured in the January issue of "Progressive Architecture."



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(Continued from Page 5)

try to heat hard surfaced floors, our radiant panel heating systems usually employ warm water as the heat transferring material. Normally placed in the floor (though there are those who argue reasonably that the pipes are more efficiently placed in a thick plaster ceiling), these evenly spaced pipes circulate moderately heated water everywhere within the structure. The water circulates through a closed system, and is reheated as required.

The most delightful thing about this type of heat is that one is almost unaware of temperature. There are no drafts, and the only cold items in the house are to be found in the refrigerator. One is quite comfortable with the inside temperature always hovering at less than 70°.

The disadvantage, obviously, is that the system cannot be switched for summer cooling. Though experiments have been made to this end, the introduction of chilled water into such a system normally leaves the floor as damp as the outside of a rather spent glass of iced tea in the heat of an August afternoon.

There are ways of heating radiantly other than hot air or warmed water. Electric resistance coils (as in a toaster) have been buried in plaster to serve the same end. Similarly, other more advanced types of resistance panels, electrically operated, have been employed. In either case, the delights of radiant heating can be enjoyed. However, the electric coil or resistance panel is costly to operate — as much as 2½ times more than the electrically powered heat pump. Besides, you can't enjoy the cooling advantages of the heat pump. Where electric rates are very, very cheap, such systems might be considered.

Too, there is radiant glass heat. It has the advantage of instant, comfortable heat direct to the body. Fuel costs are some higher than other types of radiant heating. Because of 'spot' locations necessary for such a device, heat is much less evenly distributed than a radiant panel sys-

tem. In addition, it occupies valuable wall space just as a floor furnace occupies valuable floor space. Radiant glass panel heating can be quite desirable under certain specialized conditions.

Of course, the old steam radiator transferred heat by direct radiation as well as by convection methods (it set up an air circulatory system within the room), but we seldom see them used these days. In the first place a steam system is as costly as a conventional warm air system to install and has none of its cooling possibilities. In the second place, hot water at more comfortable temperatures distributed through more efficient 'fins' can be employed. Less expensive and more comfortable than the old steam systems, the hot water systems described are frequently used in school construction.

Obviously, human comfort is in direct proportion to even distribution of the heat-carrying vehicle. At the present writing, warm water circulating evenly and entirely through the floor or ceiling areas is most satisfactory to the human organism.

**A**NOTHER type of radiant heating concerns itself with capturing and distributing heat radiated directly from the sun. This type of heat 'capture' is easily understood. All that is necessary to do is to close your car completely on some clear July afternoon. You will encounter the effects of *solar heat* upon return.

With buildings, the results are not quite so uncomfortable. A large window area is built on the south facade. An overhang is constructed so that the window is shaded during the summer months; but, because the sun is lower on the horizon, permits its entry during the cold season. On a clear, wintry day, warm sunrays flood the room with delicious heat. Should the day be cloudy, a supplementary mechanical system is employed. The heat is free, has all the qualities of radiant distribution, and from my own experience (this is the architect speaking, not the engineer) usually too warm during

certain winter months. As Texas enjoys a great number of cloudless winter days, more study should be made in regard to solar heating. With proper controlling devices, it could prove quite satisfactory.

There are other ways of solar heating, but these are in the experimental stage. Some years ago, the Massachusetts Institute of Technology devised a house with a sun trap (a glass box on the roof) which would trap heat, change it into chemical energy (by using Glauber salts) that could be stored, then release it again when desired as heat. There are other similar systems in Colorado and Arizona yet in the experimental stage. Floridians have been heating domestic hot water by trapping the sun for years!

We've worked on the sun; but when can the homeowner expect a small atomic pile to furnish energy for heating, cooling, cooking, and illumination? When will the little man be able to control his own *Nautilus*? There seems to be little hope for this type of command within the next lifetime. Great changes probably will be made in certain parts of the country by the installation of atomic power plants. These plants could possibly reduce the cost of electricity, and in this way bring conventional electric heating systems into more general use. Such systems would be similar to those with which we are already familiar.

We talked of other things that improve man's comfort. Four inches of rock wool in the ordinary ceiling will pay for itself in fuel savings within three years' time. Additional wall insulation will improve the efficiency of the system even more. Aluminum foil insulation is good only for radiant energy, hence serves the principle purpose of assisting the summer cooling system—not winter heating.

Insulated glass—that is, two sheets of glass divided by a sealed, evacuated space—is excellent. Such insulated glass is costly, however, and few

(Continued on Next Page)



homeowners seem to be able to budget their construction costs to take advantage of its savings.

So far as heating is concerned, humidity control is not much of a problem for Texans. Humidity control does become a significant problem in the northern states where one has sustained periods of uninterrupted heating. In the event that humidity might be a determining factor, a forced air convection system with its higher temperatures would be more of a problem than the radiant types.

It is unfortunate that even in the region of relatively inexpensive fuel, most Texans are dangerously and inadequately heated by the open flames which inhabit our living spaces. Thousands of others are victims of *merchandised systems*—heat-

ing systems which are inadequately designed and cheaply constructed. Yet, these merchandised systems are labeled so as to convince the buyer of their adequacy. A homeowner is 'sold' on the economy of a low first cost system. In such instances, ducts are frequently undersized and the air comes whistling through the outlets. There is often no return air duct system, which means that children will play on drafty floors in spaces unevenly heated. Worse still, these systems are expensive to operate, and the equipment breaks down at ever frequent intervals. The life of such a system is often short, requiring major replacement after a few short years of operation. For some additional expenditure, one can enjoy the most satisfactory of heating systems—one that will operate efficiently on small amounts of fuel.

This system will require a negligible amount of maintenance during its first twenty years of life.

As I drove home through the cold night peering through the rhythms of the windshield wipers, I realized that something was missing. We had not talked of the advantages of the open fireplace. Granted, the expensive additional log that I would have to throw on the fire would send 85% of its heat up the chimney. But, there is soul warming enjoyment in the fireplace flickerings on a dark, sleeting night. It is good to speculate on the shiftings of the huge log as it shucks its coating of embers. And a tang, just a tang, of wood smoke is good winter perfume. The pioneer Kerbeys did have some compensations. Yes, even with my radiant heating someday, I will have to have these compensations, too.

## CALENDAR OF COMING EVENTS

### FEBRUARY

19	Austin	Stage Production, Anna Russell, "The Funniest Woman in the World"	1-6
19-22	Laredo	Washington's Birthday Celebration	2
20-26	Dallas	Trade Mart Gift Show	4
20	El Paso	Boston Opera's "Voyage to the Moon"	4-5
21-25	Dallas	Allied Gift Show	4-5
21-25	Dallas	Dallas Gift Show	6
22	Dallas	Concert, Dallas Symphony Orchestra, John Browning, pianist	7
22	Lubbock	Lubbock Symphony Concert, Theodore Uppman, guest artist	7
23	Dallas	Earl Clement Atlee, former prime minister of Great Britain (Community Course)	8
24	Dallas	LaSalle Quartet, Scott Hall	8-9
24-27	Austin	Stage production, "Of Mice and Men"	10-11
25	Dallas	Birgit Nilsson, soprano with Dallas Symphony Orchestra, Paul Kletzki conducting	11
25	Lubbock	Civic Lubbock, Inc. — "Voyage to the Moon"	11-12
24-March 6	Houston	Houston Fat Stock Show and Livestock Exposition	15
25-28	Brownsville	Charro Days	15
25-28	El Paso	National Maid of Cotton Fashion Show	17-21
25-27	Lamesa	Fat Stock Show	18-19
27-March 9	San Antonio	16th Grand Opera Festival	19
		Feb. 27th—"The Masked Ball"	21
		Feb. 28th—"Faust"	22
		March 5th—"Nabucco"	24-27
		March 6th—"Tosca"	26
		March 9th—"Ballet"	28
27	El Paso	Ballet Russe De Monte Carlo	28
29	Dallas	Concert, Dallas Symphony Orchestra, Leonard Posner, concertmaster	28-April 3

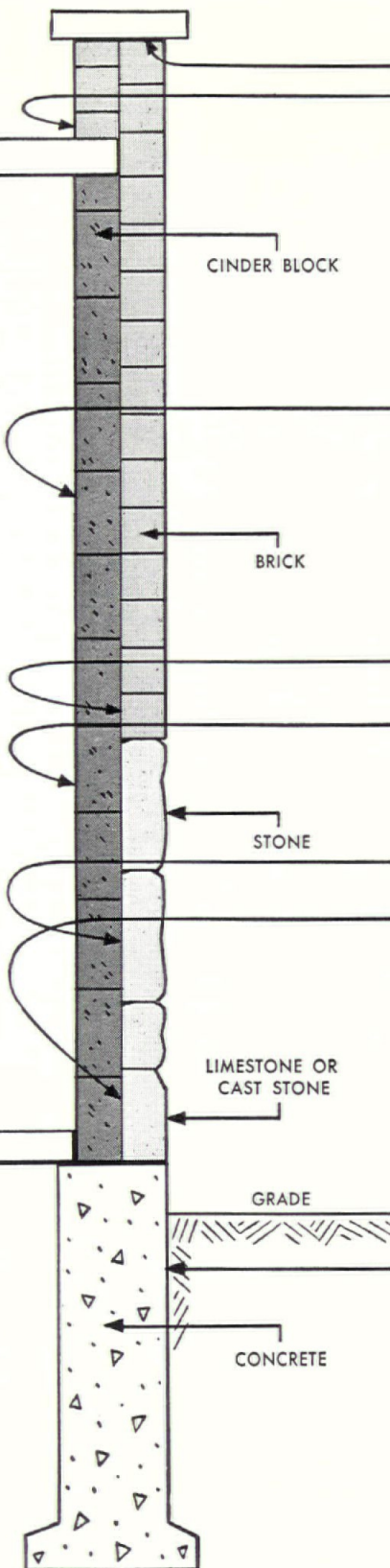
### MARCH

Houston	Houston Fat Stock Show
El Paso	Jose Greco and His Spanish Dancers
Edinburg	Concert, Eleanor Steber, soprano
Fort Worth	Opera, "Manon"
Laredo	Border Olympics
Plainview	Community Concert
Big Spring	Concert, Jose Greco Troupe
El Paso	Concert, Symphony Orchestra, Michael Rabin, violinist
	Concert, John McCollum, tenor
El Paso	Minstrel show
Cuero	South Texas Livestock Show
Austin	Jose Greco and His Spanish Dancers
El Paso	Parade of Quartets
Brownsville	Rio Grande Valley Dog Show
Fort Worth	Concert, Fort Worth Symphony Orchestra
Mercedes	21st Annual Rio Grande Valley Livestock Show, Rodeo
Odessa	West Texas Relays
Wills Point	Livestock and Poultry Show
Dallas	Concert, Dallas Symphony Orchestra, "Don Quixote"
Austin	Chicago Opera Ballet, with America's prima ballerina, Melissa Hayden
Dallas	Southwestern Automotive Show
Yoakum	FFA and 4-H Club Project Show—Wildlife Exhibit
Dallas	Concert, Dallas Symphony Orchestra, Dealey Award winner
El Paso	Concert, Symphony Orchestra with Texas Western College Orchestra and Chorus
El Paso	Home Show
Fort Worth	Stage production, "Harvey"
Sherman	Concert, Dallas Symphony Orchestra



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the building are cast-in-place concrete. So is the upper level concourse, while the grand stairways leading to it are of precast concrete.

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